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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/521,539      | 01/14/2005  | Shusaku Shibasaki    | OT-5055             | 1524             |

7590 09/08/2006

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EXAMINER

PICO, ERIC E

ART UNIT PAPER NUMBER

3654

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/521,539 | <b>Applicant(s)</b><br>SHIBASAKI, SHUSAKU |  |
|                              | <b>Examiner</b><br>Eric Pico         | <b>Art Unit</b><br>3654                   |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/14/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/14/2005</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cross-section of the coil element being rectangular claimed in claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim(s) 1-7 is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. **Regarding claim 1**, the phrase "having a spiral coil element radius decreasing with increasing axial displacement" is unclear and indefinite because it is not clear what radius the spiral coil element radius refers to and how the radius decreases as the axial displacement increases. Furthermore, it is unclear and indefinite if the axial displacement refers to a compression or tension of the spring.

5. **Claim 2** recites the limitation "the outer radius" in line 2, "the next sequential coil" in line 2, "the inner radius" in line 3, and "the preceding coil" in line 3. There is insufficient antecedent basis for this limitation in the claim.

6. **Claim 3 and 4** recites the limitation "the cross-section" in line 1. There is insufficient antecedent basis for this limitation in the claim.

7. Regarding claim 4, it is indefinite and unclear how coil element has a rectangular cross-section and an outer radius of a next sequential coil is less than an inner radius of a preceding coil given that rectangles lack an inner or outer radius.

8. **Claim 5** recites the limitation "the transverse coil pitch" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim(s) 1 is/are rejected under 35 U.S.C. 102(b) as being anticipated by Gilpin et al. U.S. Patent No. 568345.

11. **Regarding claim 1**, Gilpin et al. discloses a spring buffer for an elevator system, the buffer system disposed at one end of a hoistway of the elevator system for contacting a vertically moving member E or the elevator system in the event of an abnormal overrun, characterized in that the spring buffer includes a conical coil spring D, D' having a spiral coil element radius decreasing with increasing axial displacement.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim(s) 2, 3, 5, and 6 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilpin et al. U.S. Patent No. 568345 in view of Fowler et al. U.S. Patent No. 380651.

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14. **Regarding claim 2 and 3**, Gilpin et al. discloses the conical coil spring D, D' comprises a series of coils.

15. Gilpin et al. is silent concerning an outer radius of a next sequential coil is less than an inner radius of a preceding coil, thereby permitting the coils to be compressed axially without experiencing radial interference.

16. Fowler et al. teaches a conical coil spring A comprises a series of coil, wherein an outer radius of a next sequential coil is less than an inner radius of a preceding coil, thereby permitting the coils to be compressed axially without experiencing radial interference, shown in Figure 1; and the cross-section of the coil element is circular, shown in Figure 2.

17. It would have been obvious to one of ordinary skill in the art at the time of the invention to make an outer radius of a next sequential coil disclosed by Gilpin et al. is less than an inner radius of a preceding coil as taught by Fowler et al. to provide a fully compressive spring which will offer a uniform resistance notwithstanding variations in its length by compression.

18. **Regarding claim 5**, Gilpin et al. discloses a transverse coil pitch is constant.

19. **Regarding claim 6**, Gilpin et al. discloses the vertically moving element is an elevator car E.

20. Claim(s) 4 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilpin et al. U.S. Patent No. 568345 in view of Fowler et al. U.S. Patent No. 380651 as applied to claim 2 above, and further in view of French U.S. Patent No. 15869.

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21. **Regarding claim 4**, Gilpin et al. is silent concerning a cross-section of the coil element being rectangular.

22. French teaches a cross-section of a coil element being rectangular, shown in Figures 1 and 3.

23. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the cross-section of the coil element disclosed by Gilpin et al. a rectangular as taught by French to attain the desired spring characteristics for the given application.

24. Claim(s) 7 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilpin et al. U.S. Patent No. 568345 in view of Fowler et al. U.S. Patent No. 380651 as applied to claim 2 above, and further in view of Solymos U.S. Patent No. 3768596.

25. **Regarding claim 7**, Gilpin et al. is silent concerning the vertically moving element is a counterweight.

26. Solymos teaches a vertically moving element being a counterweight 7.

27. It would have been obvious to one of ordinary skill in the art at the time of the invention to dispose a spring buffer disclosed by Gilpin et al. for contacting a vertically moving counterweight as taught by Solymos to reduce the speed of a counterweight in case of abnormal overrun of a counterweight.

### ***Conclusion***

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28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bell et al. U.S. Patent No. 545764, Fry U.S. Patent No. 835157, Stager U.S. Patent No. 4111407.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Pico whose telephone number is 571-272-5589. The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Matecki can be reached on 571-272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EEP

  
**KATHY MATECKI**  
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